February 25, 2002
1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
    Fisheries Division
    Endangered Species Coordinator
    Nongame Coordinator
    Billings Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Sweet Grass County Conservation District, P.O. Box 749, Big Timber, MT 59011
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Boulder River Watershed Association, P.O. Box 749, Big Timber, MT 59011
Mr. Ed Deegan, 148 East Boulder Road, McLoed, MT 59052

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for a Future Fisheries Project tentatively planned to divert a small, perennial spring creek that flows into the East Boulder River around a series of livestock corrals. The intent of this project is to improve the water quality in the East Boulder River by eliminating sediment and nutrient loading into the spring caused by a concentration of livestock within the corral system. This proposed project is located on property owned by Ed Deegan approximately 18 miles south of the town of Big Timber in Sweet Grass County.

Please submit any comments that you have by 5:00 P.M., March 26, 2002 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
e-mail: mlere@state.mt.us

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
East Boulder River Water Quality Improvement Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 that directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. This project is being proposed to improve water quality in the East Boulder River by diverting a small spring creek around an existing set of livestock corrals. The project site is located on property owned by Ed Deegan approximately 18 miles south of the town of Big Timber in Sweet Grass County (Attachment 1).

I. Location of Project: This project will be conducted on an unnamed spring creek, a tributary to the East Boulder River, located approximately 18 miles south of the town of Big Timber within Township 3 South, Range 13 East, Section 4 in Sweet Grass County.

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six year operations plan for the fisheries program is to "restore and enhance degraded habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project may help met this goal. Currently, a small perennial spring creek flows through a livestock corral system for approximately 500 feet before entering the East Boulder River. This corral system contains livestock for about nine months out of the year. This concentrated livestock use has resulted in substantial sediment and nutrient loading into the spring creek and the East Boulder River. The East Boulder River supports brown trout, rainbow trout and brook trout. The overall objective of the project is to improve water quality in the East Boulder River by diverting this spring creek around the corral system.

III. Scope of the Project:

The project proposes to improve the water quality in the East Boulder River by diverting a small, perennial spring creek around a system of corrals. The spring would be diverted approximately 500 feet above it's confluence with the East Boulder River by constructing a new channel through a low elevation swale, reconnecting the spring to the river. This new channel would be approximately 100 feet in length. The old, highly degraded channel would be abandoned. Approximately 400 feet of channel length would be lost as a result of this proposed project. To provide a source of water within the corral system, an old well would be revitalized and several automatic waterers would be installed. This project is expected to cost $11,281.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $1,500.00 toward completion of the project.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Aquatic habitat in the East Boulder River would benefit from the improved water quality entering the river from the unnamed spring creek.

2. Water quantity, quality and distribution.

Short-term increases in turbidity may occur during project construction. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. To reduce turbidity, the new by-pass channel will be constructed in the dry. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota. A 310 permit (Natural Streambed and Land Preservation Act) will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted for requirements to meet the federal Clean Water Act (404 permit). In the long term, water quality will be improved by diverting this degraded reach of spring creek around the corral system.

3. Geology and soil quality, stability and moisture.

Soils along the margin of the new channel would be disturbed during channel construction, but would quickly stabilize following re-seeding efforts.

4. Vegetation cover, quantity and quality.

A narrow, 100-foot long strip of vegetation and cover would be disturbed by the construction of the new by-pass channel. Re-seeding would act to mitigate these disturbances.

5. Aesthetics.

Aesthetics would be negatively impacted during project construction due to ground disturbance and the presence of heavy equipment. In the long term, aesthetics would not be impacted.

9. Historic and archaeological sites

The proposed project likely will require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office will be contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

The overall aquatic habitat within the East Boulder River would benefit from water quality improvements downstream of the confluence with the spring creek. Consequently, the recreational fishery within this reach of river would be expected to improve.

12. Demands for energy.

Re-activating an existing well to provide water for livestock within the corral system will require additional electricity to run the pump.

13. Locally adopted environmental plans and goals.

This proposal is part of an ongoing effort by the newly formed Boulder River Watershed Association to improve the watershed.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, a small, degraded spring creek will continue to contribute sediment and nutrients to the East Boulder River as a result of concentrated livestock use.

2. The Proposed Alternative

The proposed alternative is designed to improve water quality in the East Boulder River by diverting a small spring creek around a system of livestock corrals. By diverting this spring around the corrals, sediment and nutrient loads produced by concentrated livestock use would be eliminated from the river.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA also will be published on Montana Fish, Wildlife and Parks webpage: fwp.state.mt.us.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on March 26, 2002.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620

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Email: mlere@state.mt.us

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title East Boulder River Water Quality Improvement Project

Division/Bureau Fisheries Division -Future Fisheries Improvement

Description of Project The project is being proposed to improve water quality in the East Boulder River by diverting a small, perennial spring creek around an existing set of livestock corrals. The project site is located on property owned by Ed Deegan approximately 18 miles south of the town of Big Timber in Sweet Grass County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy			X			X
13. Locally adopted environmental plans & goals			X			X
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Sweet Grass County Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office
Individuals or groups contributing to this EA Boulder River Watershed

Association
Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: February 25, 2002